mens from Sturm's collection for illustrations, thus making the thorough investigation of Bamberg's Sturm specimens very important for the history of science.

Specimens from Australia and the Pacific islands arrived from Johann Cesar GODEFFROY (1813-1885), who employed professional collectors as well as captains of his business fleet for collecting natural history objects (GEBHARDT 1964). Amalie DIETRICH (1821-1891) and Theodor KLEINSCHMIDT (1834-1881) are two of the many collectors for GODEFFROY. Bamberg Natural History Museum possesses GODEFFROY specimens, which bear localities like Rockhampton, (Lake) Elphinstone and (Port) Mackay, places which were extensively visited by DIETRICH, thus making it very likely that these specimens are indeed her products. Other GODEFFROY material at Bamberg originates from the Fiji Islands, which were explored by KLEINSCHMIDT on GODEFFROY's behalf.

Much exotic material also came to Bamberg via Johann Lukas SCHÖNLEIN (1793-1864). SCHÖNLEIN was a Professor for Medicine, who purchased all sorts of natural history objects for the museum of Bamberg during his times at Zurich and Berlin. In the first half of the 19th century, both towns maintained a market for exotic collections (SCHEMMEL 1993). SCHÖNLEIN's son might have also been collecting for Bamberg; at least he died far abroad in Africa (HAUPT 1893).

In 1914 an Arfak Astrapia *Astrapia nigra* was acquired from Emil WEISKE (1867-1950). WEISKE has become well known for collecting in Australia and New Guinea on the behalf of for example Tring, London, Berlin, Dresden, Leipzig and Vienna museums (GEBHARDT 1964).

Bamberg Museum could only afford such a complete collection of exotic birds by dealing itself in natural history objects, mainly those obtained from the Bamberg-born missionary Matthäus KIRCHNER, who lived at Khartoum, but explored the White Nile upwards deep into East-Central Africa, even obtaining Shoebills *Balaeniceps rex* at the shores of Lake Victoria. This bird species had been described only seven years previously (GOULD 1850), when, in 1857, Bamberg museum had already its own specimens on display (see fig. 4)! KIRCHNER asked in return only for seeds, agricultural products and other supports for his mission work, thus being a very cheap source of excellent and rare material, especially insects and birds. Many of his specimens were exchanged with other institutions, e.g. with the Nationaal Natuurhistorisch Museum of Leiden (cf. letters in Leiden archives, filed under „HAUPT", cf. GIJZEN 1938).

4. DISCUSSION

I use the Bamberg collection as a case-study to prove that even bird specimens without easily accessible data may have a validity for science, if time and staff power allow a thorough data check. There are many small collections existing which have suffered huge neglect and data loss. But, as the Bamberg study shows, there might be a chance to restore data to such collections making them important for science in their own right. Therefore I urge researchers to appreciate local collections, regardless of their condition. Although money and staff is often lacking to maintain these collections well, they should at least be kept. In the future some of them might be revealed to be of huge importance for ornithology. Hopefully the Bamberg case study might also encourage those who are responsible for neglected collections to work towards a full documentation of the material or, at least, to stop further data loss and decay.

Fig. 4: The two specimens of Shoebills *Balaeniceps rex* at the Naturkunde-Museum Bamberg, collected by Matthäus KIRCHNER before 1857.

Foto: DÖLLNER & STEINHEIMER 2001

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The Vienna Bird Collection: History and Main Research Focus

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Abstract. The Vienna Bird Collection was officially founded in 1793, the oldest still extant specimens however dating back to about 1755-1775, including material from Captain Cook's voyages. Present holdings amount to 150,000 scientific objects, mostly study skins, mounts, skeletons, eggs and varia (spirit specimens, flat skins, micro slides and DNA-samples). Various sources of information on the collection as well as the main research focus past and present are documented in a selected bibliography.*)

Key words: Natural History Museum Vienna, bird collection, history, bibliography

1. INTRODUCTION

The Vienna Bird Collection (Naturhistorisches Museum Wien, NMW) is numbered among the oldest still extant scientific collections of birds. Increasing public interest in the world's biodiversity, emerging from concerns for the preservation of endangered species, has recently led to a rather unexpected re-evaluation of museum collections. The importance of collecting and curating specimens as a basis for traditional as well as modern research, including aspects of ecology and molecular systematics, has been thoroughly discussed and linked with the necessity for world wide data availability. New research disciplines as well as a better understanding of population ecology have strengthened the demand for time series of study skins and enhanced the interest on historical collections and the verification of pertinent collection data.

2. HISTORY

In 1793 Emperor FRANZ II acquired a collection of mounted birds from Josef Natterer, retired imperial falconer, for his private museum of rarities („Naturaliencabinet"). After just a few years the collection already contained about 1,664 specimens (804 species) when the first still extant inventory was begun in 1806. The material received during this time includes (among others) name bearing types for LATHAM's and SHAW's descriptions of birds from James COOK's second and third voyages (1772-1780), which originally formed a part of the famous Leverian Museum. Birds purchased from various sources or collected on expeditions funded by the Imperial Court further enriched the collections (see Table 1) as well as the Imperial Menagerie in Schönbrunn, from whence many birds ultimately became part of the Vienna Bird Collection (SCHIFTER 1982, 1995, 1996). Over the years many prominent collectors and scientists contributed bird skins to the ever growing collection, among them M.H.C. LICHTENSTEIN, C.J. TEMMINCK, R. BOWDLER SHARPE. Even after 1765, when Empress MARIA THERESIA changed the status of the museum from private imperial property to a federal public institution, the greatest part of the collections still remained in the Castle of Vienna, the so called „Hofburg" and in the „Brazilian Museum" (RIEDL-DORN 1998). Lack of space ultimately made a new representative building for the natural history collections an inevitable necessity and the present „Naturhistorisches Museum Wien" was finally opened with great splendour in 1889.

Fortunately almost all of the material deposited at any time in the collection is still extant and during more than 200 years of existence only insignificant losses have occurred due to decay, fire or war times.

3. HOLDINGS

At present (1.1.2002) more than 150,000 scientific objects are housed in the Vienna Bird Collection, most of them study skins (95,000 specimens). Until the beginning of the 20th century the majority of the material was mounted, but between 1900–1950 many specimens were disassembled and incorporated in the study skin collection. Unfortunately this procedure was applied most indiscriminately, changing the overall appearance of historically valuable specimens (including some type specimens) and resulting at least in some cases in the loss of pertinent label data. About 10,000 specimens, many of historic interest, are still mounted, and 2,756 are on display in the public gallery. The egg collection consists of more than 10,000 clutches. The osteological collection of the

*) Not printed due to shortage of space (Ed.).